A NEW STATE RECORD OF *ALABAMEUBRIA STARKI* (COLEOPTERA: PSEPHENIIDAE) FROM TENNESSEE[1]

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ABSTACT: The eubriine dryopoid coleopteran *Alabameubria starki*, known only from four larval specimens, is herein reported from Tennessee. This first Tennessee specimen was discovered while processing a qualitative benthos sample from West Fork of Obey River, a fourth order Cumberland Plateau stream. A brief description of the systematics and additional information on the ecology of the larvae is also presented.

On 1 May 1980, during a survey of the benthic populations in select streams of the Cumberland Plateau in Tennessee, a single larval specimen of *Alabameubria starki* Brown (1980), a recently described species of false water penny, was collected from the West Fork of the Obey River. The site where the specimen was taken is just upstream of the Tennessee highway 52 bridge in Overton County, Tennessee (Lat. 36° 23' 49", Long. 85° 10' 28"). This the third of only four specimens of *A. starki* to be collected, and the only known individual from Tennessee (H.P. Brown, pers. comm.). The specimen has been deposited at the National Museum of Natural History.

The holotype of *Alabameubria starki* was collected from Murphy Creek (Mountain Brook) in Blount County, Alabama on 13 June 1973 approximately 1 km west of Blount Springs (Brown, 1980). The second specimen was collected from the Paint Rock River in Jackson County, Alabama on 26 August 1978 about 3.2 km north of Estill Fork (Brown, 1980). Another specimen was collected subsequent to the specimen reported herein on April, 1981 from a small tributary of Big Canoe Creek in St. Clair County, Alabama about seven miles northeast of Springville (H.P. Brown, pers. comm.).

Alabameubria starki is placed in the subfamily Eubriinae (Psephenidae) and according to Brown (1980) the North American genera most closely related to *Alabameubria* are *Acneus* and *Dicranopselaphus*. *Acneus* occurs in the western coastal states while most species of *Dicranopselaphus* are restricted to Mexico and Central America (Brown, 1976). One species of *Dicranopselaphus* (*D. variegatus* Horn, 1880) is found in the United States and is known from Illinois to New York. Both genera are very uncommon (Brown, 1976). The most commonly collected eubriine genus in Tennessee is *Ectopria*.

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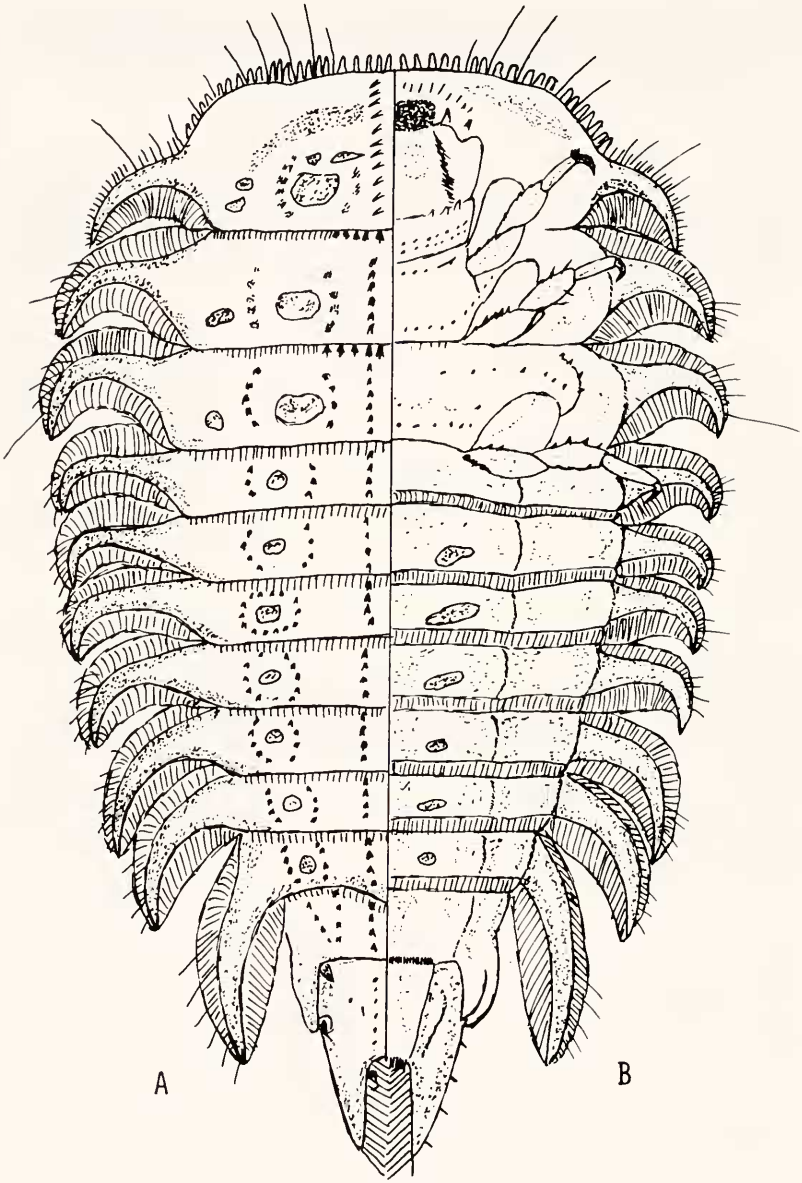

Figure 1. Larva of *Alabameubria starki*, dorsal view (A), and ventral view (B).

The most distinctive taxonomic character which immediately separates *Alabameubria starki* from the other eubriine genera is the presence of curving spine-like processes bordered by setae on the lateral margins of the abdominal and thoracic segments of the larvae (Figure 1). There are other major differences and these are described in detail by Brown (1980) in his original description of the larva.

Ecology

The specimen of *Alabameubria starki* from the West Fork of the Obey River was laden with silt as were the specimens collected from Alabama (Brown, pers. comm.), suggesting the larvae spend most of their lives in areas of reduced flow such as the undersides of rocks. According to Brown (1980) morphological characters suggest that *A. starki* feeds on detritus and sessile algae as do other eubriine larvae. Since the specimen from Tennessee was collected qualitatively using a kicknet and not discovered until analysis of the sample, its exact location in the substrate could not be ascertained.

The West Fork of the Obey River where *Alabameubria starki* was discovered has a bottom substrate of rounded sandstone cobbles and boulders with silt adhering to the rocks (Pennington, 1980). At the time of collection the river was about fourteen meters wide and averaged 0.6 meters deep. The flow was calculated to be 3.4 cubic meters per second. The banks were shaded but the main channel was exposed to direct sunlight. Other dryopoid beetles taken from the site included: Dryopidae - *Helichus lithophilus* (adults); Elmidae - *Microcylloepus pusillus* (adults and larvae), *Dubiraphia* sp. (larva), *Optioservus ovalis* (adults and larvae), and *Stenelmis* sp. (larva); Limnichidae - *Lutrochus laticeps* (larvae); and Psephenidae - *Psephenus herricki* (larvae).

Since only the larva is known for this monotypic genus the capture and or rearing of pupal and adult stages would be a valuable contribution to the knowledge of this genus and its relationship to the other eubriine species.

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